

## REMARKS

Applicant is in receipt of the Office Action mailed July 2, 2004. Claims 1 – 19 and 26 – 42 were pending. Applicant has cancelled claims 1, 5, 6, 10 – 12, 18 – 28, 33, 37 – 38, and 42, and added claims 43 - 46. Applicant has amended claims 2 – 4, 7 – 9, 13 – 17, 29, 34 – 36, and 39 – 41. Claims 2 – 4, 7 – 9, 13 – 17, 29 – 32, 34 – 36, 39 – 41, and 43 – 46 remain pending in the application.

Claim 7 was rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. This rejection is believed moot in light of Applicant's amendment of claim 7.

Claims 6, 7, 12 – 14, 38 and 39 were rejected under 35 U.S.C. §103(a) as being unpatentable over Cairns (USPN 4,962,530) in view of Levanto (USPN 5,016,002). Applicant respectfully traverses this rejection.

The Examiner asserts that Cairns discloses that the surface of each key is operable to be depressed, and cites Fig. 4 and col. 4, lines 19 – 20, wherein Cairns discloses “Then one of the buttons 10A – I is depressed and a symbol is logged in.” However, Applicant notes that Cairns teaches a matrix of keys *set above* an associated matrix of displays. Identifiers 10A – I in Fig. 4 clearly point to a set of round buttons above display LEDs 30A – I. Cairns further teaches that “Each display LED 30A – I position in the matrix 33 is *accompanied by* one of the button switches 10A – I.” (col. 8, lines 4 – 5, emphasis added)

Applicant has amended claim 7 to include the limitations of cancelled claim 1. Accordingly, Applicant can find no language in Cairns that teaches or suggests “**displaying the information on a surface of each of the plurality of keys, wherein the surface of each key is operable to be depressed,**” as recited in Applicant's amended claim 7.

In addition, Levanto teaches that “[A] 16-dot matrix is made up of elements which, for example in a liquid crystal display, are implemented as pixels.” (col. 2, lines 65 – 57) However, Applicant can find no teaching or suggestion “**wherein displaying the information comprises displaying video on the display panel of the plurality of keys of the keyboard,**” as recited in Applicant’s amended claim 7.

Claim 7, along with its dependent claims 8 – 9, is therefore believed to patentably distinguish over Cairns for the above reason. Amended claims 13 and 39 recite features similar to those of claim 1, and are thus believed, along with their respective dependent claims, to patentably distinguish over Cairns for at least the same reason.

Claim 42 was rejected under 35 U.S.C. §102(b) as being unpatentable over DeMonte (USPN 4,897,651, hereinafter “DeMonte”). Applicant has cancelled claim 42, and accordingly believes this rejection to be moot.

Claims 1 – 4, 8 – 10, 15 – 18, 20 – 22, 25, 26, 28 – 30, 33 – 36, 40, and 41 were rejected under 35 U.S.C. §103(a) as being unpatentable over Litt et al. (USPN 4,752,772, hereinafter “Litt”) in view of Gouzman et al. (USPN 6,278,441, hereinafter “Gouzman”). Applicant respectfully traverses this rejection.

The Examiner states that Litt discloses a method for displaying information on the keys of a keyboard. However, Litt discloses a *single* modified key operable to incorporate a mechanical Braille display. (col. 2, lines 53 – 57) The Examiner further states that Gouzman discloses an invention in which information is displayed on a plurality of keys and that the configuration of a plurality of keys is changed. However, Applicant can find no teaching or suggestion that the three embossed tactile displays (ETDs) 202 of Fig. 5a are keys, “**wherein the surface of each key is operable to be depressed,**” as recited in Applicant’s amended claim 2.

Furthermore, Applicant notes that Litt teaches away from the use of a *plurality* of keys to display Braille information at Col. 2, lines 26 – 48. Specifically, Litt teaches that

“Because the Braille reading process involves ‘looking’ at segments of the line and may involve more than a single reading finger, it has been believed that an effective interface with a computer must therefore use a multicell display which simultaneously displays phrases or segments of the text being read. *If a multicell display must be used, then the separate reading location is unavoidable and the consequent limitations on user efficiency naturally follow.*” (emphasis added) Litt further teaches that “We have discovered that efficient and effective Braille reading does not require a multicell display Comparable reading speeds and comprehension can be achieved with a single cell display which the user can electronically scan over the target text. *As part of our discovery, we have eliminated the inherent inefficiencies associated with a separate Braille reading terminal by integrating the reading function into a key of the standard keyboard.*” (emphasis added)

Accordingly, Applicant respectfully submits that, even if, arguendo, Gouzman is assumed to teach a plurality of keys, modifying the teaching of Litt to encompass a plurality of keys would change the principle of operation of Litt. Applicant respectfully reminds the Examiner that, in accordance with MPEP 2143.01, “If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious.”

Applicant has amended claim 2 to include the limitations of cancelled claim 1. Accordingly, Applicant can find no language in Litt or Gouzman that teaches or suggests “**displaying the information on a surface of each of the plurality of keys, wherein the surface of each key is operable to be depressed,**” as recited in Applicant’s amended claim 2. Claim 2, along with its dependent claims 3 – 4, is therefore believed to patentably distinguish over Litt for at least the above reasons. Claims 29 and 34 recite features similar to those of claim 2, and are thus believed, along with their respective dependent claims, to patentably distinguish over the cited references for at least the same reasons.

Furthermore, Applicant can find no language in Litt or Gouzman, either separately or in combination, that teaches or suggests a method “wherein receiving the request to change the configuration of the plurality of keys comprises detecting **a user selection of an option from the configuration panel**,” as recited in Applicant’s claim 8. In contrast, Litt teaches the use of a reading cursor controlled by standard cursor controls, operable to identify a position within text. Interface circuitry then generates a control signal which yields the Braille representation of the information appearing in that position (i.e. the selected text). (col. 3, lines 3 – 16) Applicant therefore respectfully disagrees with the Examiner’s assertion that “such arrow keys or other ‘standard cursor controls’ on a keyboard would be a configuration panel.”

Accordingly, claim 8 is believed to patentably distinguish over Litt, along with claims 16, 40, 43, and 45, which describe similar limitations.

In light of the above remarks, Applicant believes further traversal of the Examiner’s rejections to be unnecessary at this time.

## CONCLUSION

In light of the foregoing remarks, Applicant respectfully submits the application is now in condition for allowance, and an early notice to that effect is requested.

No fees are believed necessary; however , the Commissioner is authorized to charge any fees which may be required, or credit any overpayment, to Meyertons, Hood, Kivlin, Kowert, & Goetzel, P.C. Deposit Account No. 50-1505\5681-49800\BNK.

Respectfully submitted,

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